

### Abstract

In a method for manufacturing a solid-state imaging device of the present invention, a pad insulting film 2 made of an oxide film and an anti-oxidizing film 3 made of a nitride film are deposited on a n-type semiconductor substrate 1. Then, an opening 4 is formed to expose an element isolation formation region of the semiconductor substrate 1. Next, an anti-oxidizing film (not shown) for burying the opening 4 is formed on the substrate and anisotropic etching is performed to form a sidewall 5. Subsequently, a trench 6 is formed using the anti-oxidizing film 3 and the sidewall 5 as a mask. Then, a p-type impurity is implanted into a part of the semiconductor substrate 1 which is exposed at the side face of the trench 6 and a thermal oxide film is formed in the surface portion of the trench 6 in the semiconductor substrate 1. Thereafter, the trench 6 is buried with a burying film 8.